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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/705,564	11/03/2000	Rodric C. Fan	M-8813 US	6675

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EXAMINER	
FOX, BRYAN J	
ART UNIT	**PAPER NUMBER**
2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/705,564	FAN, RODRIC C.	
	Examiner	Art Unit	
	Bryan J. Fox	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,17-26,28,31 and 32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,17-26,28,31 and 32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 4-8, 17, 20-22, 25-28, 31 and 32. are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al. (5,864,753) in view of Ishikawa et al. (5,640,696).

Regarding claims 1 and 17, Morita discloses a radio receiving system and a method of tuning a mobile radio system comprising: (see Fig. 1), a location unit (navigation unit 26), a wireless interface to a wide area network (communication unit 18), a frequency selection unit coupled to receive a current location from the location unit (see col. 2, lines 32-37), in response to a change (user obtaining data concerning a new radio station by sending his current position to the base station when the base

station travels to a new area where the previously identified radio station is not accessible, col. 2, lines 38-43), wherein the frequency selection unit retrieves over the wireless interface, tuning data representing a set of frequencies of broadcast signals that can be received at the current location form a data storage system associated with a server on the wide area network and further selects a frequency from the set of frequencies of broadcast signals in the tuning data retrieved (see col. 4, lines 24-30), the tuning data retrieved having been filtered according to a previously determined set of selection criteria based on user content preferences (controller providing base station with request messages as sequential data reflecting the plurality of programs the driver wants to listen to, see col. 4, lines 9-24), and provides the selected frequency as input to the radio receiver (see col. 4, lines 30-39). Morita fails to explicitly teach that the frequency selection is in response to a change in signal strength in the broadcast signal received by the receiver.

In an analogous field of endeavor, Ishikawa discloses an automatic station selection and receiving apparatus in which broadcasting stations with their corresponding broadcasting frequencies for a particular regions are stored in a memory unit from which stations (see col. 3, lines 32-53). According to Ishikawa, when a when it is judged that the level of a signal being received is judged is not higher than a predetermined threshold level, a new broadcasting station is re-selected in order to select an appropriate station, which prevents a user form listening to a degraded station signal (see col. 4, lines 11-40, col. 8, line 6 to col. 9, line 6).

It would therefore have been obvious to one of ordinary skill in the art to combine Ishikawa's broadcasting station selection system with Morita's radio tuning system in order to ensure the selection of high quality broadcasting stations for listening as taught by Ishikawa.

Regarding claims 4, 5, 20 and 21, Morita further discloses a user interface electrically coupled to receive from the frequency selection unit data arranged as radio signal content categories and to output a menu of categories to a listener (see col. 4, lines 29-37) wherein at least a portion of the menu is output on a visual display (see col. 4, lines 39-43, col. 5, lines 23-26).

Regarding claim 6, Morita further discloses wherein at least a portion of the menu is audibly output by the interface (see col. 21-23).

Regarding claims 7 and 8, Morita further discloses a user interface electrically coupled to receive and relay to the frequency selection unit a user command to select a particular content category in an arrangement of radio signal content categories stored in the frequency selection unit wherein the command is a verbal command (see col. 3, lines 15-55).

Regarding claim 22, Morita further discloses the act of receiving a command from a listener to select a particular content category (see col. 44-55, col. 4, lines 5-24).

Regarding claims 25 and 31, Morita further discloses wherein the location information is provided using global positioning system information (see col. 3, lines 37-43).

Regarding claims 26 and 32, Morita's teaching of the communication unit transmitting the data to the base station via a vehicle telephone line, see col. 3, lines 15-23) meets providing location information using cellular wireless communications system information.

Regarding claim 27, Morita inherently teaches wherein the change in signal reception condition corresponds to a change in the strength of the radio signal then being received falling below a predetermined value (inherent feature of user obtaining data concerning a new radio station by sending his current position to the base station when the base station travels to a new area where the previously identified radio station is not accessible, col. 2, lines 38-43).

Regarding claim 28, Morita's teaching of the radio station tuning system being configured to automatically has access to a base station when the vehicle is not running in an area where the desired program is receivable (see col. 4, lines 9-15), reads on the particular frequency is selected based on content category of the broadcast signal being received prior to the change in signal reception condition.

5. Claims 2, 3, 18, 19, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al and Ishikawa et al as applied to claim 1 and 17 above, and further in view of Lee et al. (6,374,177).

Regarding claims 2, 3, 18 and 19, Morita as modified by Ishikawa fail to explicitly teach wherein the tuning data comprises FM radio station frequencies and satellite transmission frequencies.

Lee teaches a radio receiving system having the capability of frequency modulation transmission frequencies (see col. 10, lines 52-63, col. 11, lines 5-19, col. 12, lines 13-22), and satellite transmissions using satellite transmission frequencies (see col. 10, 49-59).

It would therefore have been obvious to one of ordinary skill in the art to provide for the use of satellite and cellular wireless communication information in the system of Morita and Ishikawa in order to provide personalized information services through available communication networks that cover a wide area such as frequency modulation, satellite and cellular communications as taught by Lee.

Regarding claims 23 and 24 Morita as modified by Ishikawa fail to teach wherein the set of selection criteria is provided by a system user selecting one or more content categories via the Internet and wherein the tuning data is provided by downloading via the Internet wherein the user selects the one or more content categories via the World-wide Web.

Lee discloses a method for providing navigational services that include the use of verbal (audio) command through audio feedback through speech synthesis to make selections from the available categories as well the provision wireless Internet access to the multimedia device such as selection of content categories via the World-Wide Web (see col. 6, lines 58-65, col. 10, lines 8-39).

It would therefore have been obvious to one of ordinary skill in the art to provide the multimedia capability of Lee to the system of Morita and Ishikawa in order to

ensure the availability of the advantages of using the Internet to users such as direct streaming audio broadcasts and other Internet content as taught by Lee.

Response to Arguments

Applicant's arguments filed December 22, 2006 have been fully considered but they are not persuasive.

The Applicant argues the modification of Morita with Ishikawa would render Morita unsatisfactory for its stated purpose. The Examiner respectfully disagrees. If a person of ordinary skill in the art were to modify Morita with Ishikawa, the result would be changing a station when the signal strength falls below a threshold. This would not interrupt a user's desired program as the signal level would already be unacceptable. Further, the goal of Morita is to enable a radio receiver to be tuned to a radio station offering a program of a desired kind (see column 1, lines 48-54). The combination of Morita and Ishikawa would suggest to a person of ordinary skill in the art changing to a similar kind of station in response to a signal level of an original station degrading to an unacceptable level. This would not render Morita unsatisfactory for its stated purpose.

The Applicant makes similar arguments with respect to the remainder of the claims, however, for the same reasons outlined above, the Examiner respectfully disagrees.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryan Fox
March 5, 2007

CHARLES APPIAH
PRIMARY EXAMINER